

# United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Vignia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/950,003	09/12/2001	Pasqua Oreste	MARGI 27 PI	9777
23599	7590 08/25/2003			
•	HITE, ZELANO & BR	EXAMINER		
2200 CLARENDON BLVD. SUITE 1400			KRISHNAN, GANAPATHY	
ARLINGTON	I, VA 22201		ART UNIT	PAPER NUMBER
			1623	<u> </u>
			DATE MAILED: 08/25/2003	10

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)				
•	09/950,003	ORESTE ET AL.				
Office Action Summary	Examiner	Art Unit				
	Ganapathy Krishnan	1623				
The MAILING DATE of this communication	appears on the cover sheet with	the correspondence address				
Peri d for Reply						
A SHORTENED STATUTORY PERIOD FOR REITHE MAILING DATE OF THIS COMMUNICATION  Extensions of time may be available under the provisions of 37 CFR after SIX (6) MONTHS from the mailing date of this communication.  If the period for reply specified above is less than thirty (30) days, a  If NO period for reply is specified above, the maximum statutory per  Failure to reply within the set or extended period for reply will, by state of the second patent term adjustment. See 37 CFR 1.704(b).	N. R.1.136(a). In no event, however, may a repreply within the statutory minimum of thirty (ind will apply and will expire SIX (6) MONTHatute, cause the application to become ABAI	ly be timely filed  30) days will be considered timely.  IS from the mailing date of this communication.  NDONED (35 U.S.C. § 133).				
Status						
<b>,_</b>	This action is non-final.					
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.  Disposition of Claims						
4)⊠ Claim(s) <u>1-62</u> is/are pending in the application	tion					
	4a) Of the above claim(s) is/are withdrawn from consideration.					
	✓ Claim(s) <u>1-16,21-34,38-53 and 56-62</u> is/are allowed.					
6) Claim(s) <u>17-20, 35-37 and 54, 54</u> is/are rejected.						
7) Claim(s) is/are objected to.  8) Claim(s) are subject to restriction and/or election requirement.						
Application Papers	aror orodion roquironioni.					
9) The specification is objected to by the Exam	iner.					
10)☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner.						
Applicant may not request that any objection to						
11)☐ The proposed drawing correction filed on	is: a)□ approved b)□ dis	approved by the Examiner.				
If approved, corrected drawings are required in reply to this Office action.						
12) The oath or declaration is objected to by the Examiner.						
Priority under 35 U.S.C. §§ 119 and 120						
13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).						
a) ☐ All b) ☐ Some * c) ☐ None of:						
1. Certified copies of the priority documents have been received.						
2. Certified copies of the priority docume	2. Certified copies of the priority documents have been received in Application No					
<ul> <li>3. Copies of the certified copies of the papplication from the International</li> <li>* See the attached detailed Office action for a limit of the certified paper.</li> </ul>	Bureau (PCT Rule 17.2(a)).					
14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).						
a) ☐ The translation of the foreign language 15)☐ Acknowledgment is made of a claim for dom	•					
Attachment(s)	. ,	-				
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449) Paper Note	5) Notice of Inf	nmmary (PTO-413) Paper No(s) ormal Patent Application (PTO-152)				

Art Unit: 1623

#### **DETAILED ACTION**

The Amendment A (paper # 9) filed October May 05, 2003 has been received, entered into the record and carefully considered. The following information provided in the amendment affects the instant application:

- 1. Claims 1, 11, 12, 17, 22, 33-35, 41 and 50 have been amended.
- 2. Amendments to specification.
- 3. Remarks drawn to rejections under 35U.S.C. 112 second paragraph and 35 U.S.C. 103 and double patenting.

Claims 1-62 are pending.

## Specification and

The objection to the specification has been overcome by amendment.

#### Claim Objections

The objections to claim 50 have been overcome by amendment. However, claim 50 is objected to since the symbol for percentage is missing after the numeral 30.

### **Priority**

The objection to the priority claim advanced in the previous office action is being maintained for reasons of record.

### Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

Application/Control Number: 09/950,003

Art Unit: 1623

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

The rejection of claims 1, 11, 12, 17, 22, 33-35 and 41 advanced in the previous office action have been overcome by amendment. The following new rejections are made of record.

Claims 17-20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 17 (iv) recites the treatment of the salt of the O-oversulfated product with a mixture of dimethyl sulfoxide/methanol. Claim 17(v) recites treating the salt of the partially O-desulfated product thus obtained with an O-sulfating agent. These two recitations are confusing. It is not clear if in step (iv) a partially O-desulfated product is obtained. Clarification is needed.

Claims 18-20 which are dependent on Claim 17 are also seen to be indefinite.

### **Double Patenting**

The statutory type (35 U.S.C. 101) double patenting rejection of instant claims 1-10 and 14-16 with claims 1-10 and 27-29 of Application No. 09/738879 has been overcome by abandonment of Application No. 09/738879.

### Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

Art Unit: 1623

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 35-37, 54 and 55 are rejected under 35 U.S.C. 102(e) as being anticipated by Zoppetti et al (US 6162797).

The applied reference has a common inventor with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

Claims 35-37 are product by process claims drawn to a C5 epimerized N,O-sulfate K5 gycosaminoglycans obtainable by the process recited. Claims 54 and 55 are drawn to pharmaceutical compositions of the compounds of claim 35.

"Even though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process." In re Thorpe, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985).

Zoppetti et al disclose C5 epimerized N, O-sulfated K5 glycosaminoglycans (see col. 2, line 16 through col. 4, line 61 and col. 8, lines 27-40) and also pharmaceutical compositions containing the derivatives (see col. 4, lines 50-57).

Application/Control Number: 09/950,003

Art Unit: 1623

# Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 11-13 and 17-62 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lormeau et al (USPN 5550116) in combination with Zoppetti et al (USPN 6162797) and Branellec et al (USPN 5599801) has been overcome in view of applicants arguments.

#### Conclusion

- 1. Claims 17-20, 35-37, 54 and 55 are rejected.
- 2. Claims 1-16, 21-34, 38-53 and 56-62 drawn to C5 epimerized N,O-sulfated polysaccharides with various percentages of substitution and processes for making are seen to be free of prior art.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ganapathy Krishnan whose telephone number is 703-305-4837. The examiner can normally be reached on 8.30am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James O. Wilson can be reached on 703-308-4624. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Application/Control Number: 09/950,003

Art Unit: 1623

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-

1235.

GK

JAMES O. WILSON

SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1600